Case No. 10743/3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Keith Wood; Ericka Hawkins;
Mike Scurria; Dieter Klaubert

Serial No: 10/053,482

Examiner: Not assigned

Filed: November 2nd, 2001

Group Art Unit: 1743

For: COMPOSITIONS AND METHODS TO CO-LOCALIZE LUMINOPHORES WITH LUMINESCENT PROTEINS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on the attached Form PTO-1449 be considered by the Examiner and made of record.

In accordance with 37 C.F.R. § 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

It is believed that this Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with filing of this Information Disclosure Statement. However, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Brinks Hofer Gilson & Lione Deposit Account No. 23-1925. A duplicate copy of this document is enclosed. In accordance with Rule 37 C.F.R. § 1.98(d) copies of documents cited are enclosed:

	DOCUMENT NUMBER	DATE	NAME
A1	6,133,459	10/17/00	Schaap et al.
A2	5,587,286	12/24/96	Pahuski et al.
A3	5,650,289	6/22/97	Wood
A4	5,641,641	6/24/97	Wood
A5	5,650,299	6/22/97	Lawman et al.
A6	5,700,645	12/23/97	Pahuski et al.
A7	5,814,471	9/29/98	Wood
A8	5,831,102	11/3/98	Bronstein et al.
A9	5,965,453	10/12/99	Skiffington et al.
A10	5,908,751	6/1/97	Higo et al.
A11	5,891,702	4/6/99	Sakakibara et al.
A12	5,891,659	4/6/99	Murakami et al.
A13	5,840,572	11/24/98	Copeland et al.
A14	5,811,251	9/22/98	Hirose et al.
A15	5,770,391	6/23/98	Foote et al.
A16	5,648,232	7/15/97	Squirrell
A17	5,518,883	5/21/96	Soini
A18	5,246,834	9/21/93	Tsuji et al.
A19	4,806,415	2/21/89	Fossati
A20	4,665,022	5/12/87	Schaeffer et al.
A21	4,604,364	8/5/86	Kosak

	DOCUMENT NUMBER	DATE	NAME
A22	4,501,813	2/26/85	Lovgren et al.
A23	4,349,510	9/14/82	Kolehmainen et al.
A24	4,080,265	3/21/78	Antonik
A25	5,374,535	12/20/94	Zomer et al.
A26	5,374,534	12/20/94	Zomer et al.
A27	3,958,938	5/25/76	Doonan et al.
A28	5,541,309	6/30/96	Prasher
A29	6,007,996	12/28/99	McNamara et al.
A30	5,741,668	4/21/98	Ward et al.
A31	5,798,263	8/25/98	Wood et al.
A32	5,035,999	6/30/91	Geiger et al.
A33	5,098,828	3/24/92	Geiger et al.
A34	6,004,767	12/21/99	Crouch et al.
A35	5,023,181	6/11/91	Inouye

	DOCUMENT NUMBER	DATE	COUNTRY
A36	WO 99/66324	23 Dec 99	PCT

	OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)
A37	Theodora W. Greene and Peter G. M. Wuts, "Monoprotection of Dicarbonyl Compounds", in Protective Groups in Organic Synthesis - 2nd edition (John Wiley 1991).
A38	Shoji Inoue et al., "Complete Structure of Renilla Luciferin and Luciferyl Sulfate", Tetrahedron Letters No. 31, pp 2685 – 2688 (1977)
A39	R. Y. Tsien, "A non-disruptive technique for loading calcium buffers and indicators into cells", Nature, vol. 290, pp 527-528 (9 April 1981)
A40	Peter R. Redden et al., "Acyloxymethyl acidic drug derivatives: in vitro hydrolytic reactivity", International Journal of Pharmaceutics, vol. 180, pp 151-160 (1999)
A41	Katsunori Teranishi and Osamu Shimomura, "Coelenterazine Analogs as Chemiluminescent Probe for Superoxide Anion", Analytical Biochemistry 249: pp 37-43 (1997)
A42	Osamu Shimomura et al., "Semi-synthetic aequorins with improved sensitivity to Ca^{2+} ions", Biochem. J. 261: pp 913-920 (1989)
A43	Satoshi Inouye and Osamu Shimomura, "The Use of *Renilla* Luciferase, *Oplophorus* Luciferase, and Apoaequorin as Bioluminescent Reporter Protein in the Presence of Coelenterazine Analogues as Substrate", Biochemical and Biophysical Research Communications 233: 349-353 (1997)
A44	Keith Jones et al., "Glowing jellyfish, luminescence and a molecule called coelenterazine", Tibtech vol. 17, pp 477-481 (1999)
A45	Osamu Shimomura and Katsunori Teranishi, "Light-emitters involved in the luminescence of coelenterazine", Luminescence 15: 51-58 (2000)
A46	Osamu Shimomura et al., "The relative rate of aequorin regulation from apoaequorin and coelenterazine analogues", Biochem. J. 296: 549-551 (1993)
A47	Osamu Shimomura, "Membrane permeability of coelenterazine analogues measured with fish eggs", Biochem. J. 326: 297-298 (1997)
A48	"Coelenterazine and Coelenterazine Derivatives", Molecular Probes – Product Information, pp 1-3 (4 April 2000)

	OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)
A49	"Coelenterazine Sampler Kit", Molecular Probes – Product Literature, pp 1-3, (10/16/2000)
A50	Dubuisson, M. L. et al., "Antioxidative properties of natural coelenterazine and synthetic methyl coelenterazine in rat hepatocytes subjected to tert-butyl hydroperoxide-induced oxidative stress", Biochem-Pharmacol. 60(4): pp 471-8 (2000)
A51	Angers, S. et al., "Detection of beta 2-adrenergic receptor dimerization in living cells using bioluminescence resonance energy transfer (BRET)", Prod. Natl. Acad. Sci. USA 97(7): pp 3684-9 (2000)
A52	Liu, J. and Escher, A., "Improved assay sensitivity of an engineered secreted Renilla luciferase", Gene 237(1): pp 153-9 (1999)
A53	Srikantha, T. et al., "The sea pansy Renilla reniformis luciferase serves as a sensitive bioluminescent reporter for differential gene expression in Candida albicans", J. Bacteriol. 178(1): pp 121-9 (1996)
A54	Skarpidi, E. et al., "Novel in vitro assay for the detection of pharmacologic inducers of fetal hemoglobin", Blood 96(1): pp 321-6 (2000)
A55	Parsons, S.J. et al., "Use of a dual firefly and Renilla luciferase reporter gene assay to simultaneously determine drug selectivity at human corticotrophin releasing hormone 1 and 2 receptors", Anal. Biochem. 281(2): pp 187-92 (2000)
A56	Stables, J. et al., "Development of a dual glow-signal firefly and Renilla luciferase assay reagent for the analysis of G-protein coupled receptor signalling", J. Recept. Signal Transduct. Res. 19(1-4): pp 395-410 (1999) – Abstract Only
A57	Grentzmann, G. et al., "A dual-luciferase reporter system for studying recording signals", RNA 4(4): pp 479-86 (1998)
A58	Liu, J. et al, "Visualizing and quantifying protein secretion using a Renilla luciferase-GFP fusion protein", Luminescence 15(1): pp 45-9 (2000)
A59	Craig, Frank F. et. al. "Membrane-permeable luciferin esters for assay of firefly luciferase in live intact cells" Biochem. J. 276 pp 637-641 (1991)

If, for any reason, the Examiner feels that an interview would be helpful to resolve any issues, he is respectfully requested to contact the undersigned attorney at (312) 321-4229.

Respectfully submitted,

Date: April 24th, 2002

John Murray, Ph.D.
Registration No. 44,251
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610
(312) 321-4200

FORM PTO-1449	SERIAL NO. 10/053,482	CASE NO. 10743/3
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE November 2nd, 2001	GROUP ART UNIT 1743
(use several sheets if necessary)	APPLICANT(S): Wood, Keith et al.	

REFERENCE DESIGNATION **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
	A1	6,133,459	10/17/00	Schaap et al.		
	A2	5,587,286	12/24/96	Pahuski et al.		
	A3	5,650,289	6/22/97	Wood		
	A4	5,641,641	6/24/97	Wood		
	A5	5,650,299	6/22/97	Lawman et al.		
	A6	5,700,645	12/23/97	Pahuski et al.		
	A7	5,814,471	9/29/98	Wood		
	A8	5,831,102	11/3/98	Bronstein et al.		
	A9	5,965,453	10/12/99	Skiffington et al.		
	A10	5,908,751	6/1/97	Higo et al.		
	A11	5,891,702	4/6/99	Sakakibara et al.		
	A12	5,891,659	4/6/99	Murakami et al.		
	A13	5,840,572	11/24/98	Copeland et al.		
	A14	5,811,251	9/22/98	Hirose et al.		
	A15	5,770,391	6/23/98	Foote et al.		
	A16	5,648,232	7/15/97	Squirrell		
	A17	5,518,883	5/21/96	Soini		
	A18	5,246,834	9/21/93	Tsuji et al.		
	A19	4,806,415	2/21/89	Fossati		
	A20	4,665,022	5/12/87	Schaeffer et al.		
	A21	4,604,364	8/5/86	Kosak		
	A22	4,501,813	2/26/85	Lovgren et al.		
	A23	4,349,510	9/14/82	Kolehmainen et al.		
	A24	4,080,265	3/21/78	Antonik		
	A25	5,374,535	12/20/94	Zomer et al.		
	A26	5,374,534	12/20/94	Zomer et al.		
	A27	3,958,938	5/25/76	Doonan et al.		
	A28	5,541,309	6/30/96	Prasher		
	A29	6,007,996	12/28/99	McNamara et al.		
	A30	5,741,668	4/21/98	Ward et al.		
	A31	5,798,263	8/25/98	Wood et al.		
	A32	5,035,999	6/30/91	Geiger et al.		
	A33	5,098,828	3/24/92	Geiger et al.		
	A34	6,004,767	12/21/99	Crouch et al.		
	A35	5,023,181	6/11/91	Inouye		

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449	SERIAL NO. 10/053,482	CASE NO. 10743/3
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE November 2nd, 2001	GROUP ART UNIT 1743
(use several sheets if necessary)	APPLICANT(S): Wood, Keith et al.	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES	NO
	A36	WO 99/66324	23 Dec 99	PCT			

EXAMINER INITIAL		OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)
	A37	Theodora W. Greene and Peter G. M. Wuts, "Monoprotection of Dicarbonyl Compounds", in Protective Groups in Organic Synthesis - 2nd edition (John Wiley 1991).
	A38	Shoji Inoue et al., "Complete Structure of Renilla Luciferin and Luciferyl Sulfate", Tetrahedron Letters No. 31, pp 2685 – 2688 (1977)
	A39	R. Y. Tsien, "A non-disruptive technique for loading calcium buffers and indicators into cells", Nature, vol. 290, pp 527-528 (9 April 1981)
	A40	Peter R. Redden et al., "Acyloxymethyl acidic drug derivatives: in vitro hydrolytic reactivity", International Journal of Pharmaceutics, vol. 180, pp 151-160 (1999)
	A41	Katsunori Teranishi and Osamu Shimomura, "Coelenterazine Analogs as Chemiluminescent Probe for Superoxide Anion", Analytical Biochemistry 249: pp 37-43 (1997)
	A42	Osamu Shimomura et al., "Semi-synthetic aequorins with improved sensitivity to Ca^{2+} ions", Biochem. J. 261: pp 913-920 (1989)
	A43	Satoshi Inouye and Osamu Shimomura, "The Use of *Renilla* Luciferase, *Oplophorus* Luciferase, and Apoaequorin as Bioluminescent Reporter Protein in the Presence of Coelenterazine Analogues as Substrate", Biochemical and Biophysical Research Communications 233: 349-353 (1997)
	A44	Keith Jones et al., "Glowing jellyfish, luminescence and a molecule called coelenterazine", Tibtech vol. 17, pp 477-481 (1999)
	A45	Osamu Shimomura and Katsunori Teranishi, "Light-emitters involved in the luminescence of coelenterazine", Luminescence 15: 51-58 (2000)
	A46	Osamu Shimomura et al., "The relative rate of aequorin regulation from apoaequorin and coelenterazine analogues", Biochem. J. 296: 549-551 (1993)
	A47	Osamu Shimomura, "Membrane permeability of coelenterazine analogues measured with fish eggs", Biochem. J. 326: 297-298 (1997)
	A48	"Coelenterazine and Coelenterazine Derivatives", Molecular Probes – Product Information, pp 1-3 (4 April 2000)
	A49	"Coelenterazine Sampler Kit", Molecular Probes – Product Literature, pp 1-3, (10/16/2000)
	A50	Dubuisson, M. L. et al., "Antioxidative properties of natural coelenterazine and synthetic methyl coelenterazine in rat hepatocytes subjected to tert-butyl hydroperoxide-induced oxidative stress", Biochem-Pharmacol. 60(4): pp 471-8 (2000)
	A51	Angers, S. et al., "Detection of beta 2-adrenergic receptor dimerization in living cells using bioluminescence resonance energy transfer (BRET)", Prod. Natl. Acad. Sci. USA 97(7): pp 3684-9 (2000)
	A52	Liu, J. and Escher, A., "Improved assay sensitivity of an engineered secreted Renilla luciferase", Gene 237(1): pp 153-9 (1999)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449	SERIAL NO. 10/053,482	CASE NO. 10743/3
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE November 2nd, 2001	GROUP ART UNIT 1743
(use several sheets if necessary)	APPLICANT(S): Wood, Keith et al.	

EXAMINER INITIAL	OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
	A53	Srikantha, T. et al., "The sea pansy Renilla reniformis luciferase serves as a sensitive bioluminescent reporter for differential gene expression in Candida albicans", J. Bacteriol. 178(1): pp 121-9 (1996)
	A54	Skarpidi, E. et al., "Novel in vitro assay for the detection of pharmacologic inducers of fetal hemoglobin", Blood 96(1): pp 321-6 (2000)
	A55	Parsons, S.J. et al., "Use of a dual firefly and Renilla luciferase reporter gene assay to simultaneously determine drug selectivity at human corticotrophin releasing hormone 1 and 2 receptors", Anal. Biochem. 281(2): pp 187-92 (2000)
	A56	Stables, J. et al., "Development of a dual glow-signal firefly and Renilla luciferase assay reagent for the analysis of G-protein coupled receptor signalling", J. Recept. Signal Transduct. Res. 19(1-4): pp 395-410 (1999) – Abstract Only
	A57	Grentzmann, G. et al., "A dual-luciferase reporter system for studying recording signals", RNA 4(4): pp 479-86 (1998)
	A58	Liu, J. et al, "Visualizing and quantifying protein secretion using a Renilla luciferase-GFP fusion protein", Luminescence 15(1): pp 45-9 (2000)
	A59	Craig, Frank F. et. al. "Membrane-permeable luciferin esters for assay of firefly luciferase in live intact cells" Biochem. J. 276 pp 637-641 (1991)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.